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cond. 1
- (ii) separating neutral particles from an ion stream; and then
 - (iii) passing the ion stream into a reaction/collision cell section.
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9. (Amended) A method as claimed in claim 6, which includes generating the ion stream at atmospheric pressure, passing the ion stream through an aperture into an ion optics compartment maintained at a substantially sub-atmospheric pressure, thereby to generate an expanding supersonic jet, wherein step (ii) includes obstructing the supersonic jet, to obstruct passage of neutral particles into the reaction/collision cell section.

Please replace claim 10 with the following:

10. (Amended) A method as claimed in claim 6 wherein step (iii) comprises passing the ions into the collision/reaction cell section for collision and/or reaction, and subsequently subjecting the ions to mass analysis.

IN THE ABSTRACT

Please amend the Abstract as follows:

28 ✓

A mass spectrometer has an ion source for producing sample ions. The ions pass through an ion interface, to a reaction/collision cell section. An ion-neutral decoupling device is provided between the ion interface and the reaction/collision cell section, to provide substantial separation between ions and neutral particles. The supersonic jet entering the spectrometer can have sufficient energy to cause the plasma gases, such as argon, to overcome the pressure differential between the reaction/collision cell and an upstream section of the spectrometer so as to penetrate into the reaction/collision cell; the decoupling device prevents this. The decoupling device can have offset apertures provided by plates or rods or other comparable arrangements, or can comprise a quadrupolar electrostatic deflector, an electrostatic sector deflector or a magnetic sector deflector.
